10) IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT KUVEMPUNAGARA 2ND STAGE IN WARD NO. 11 KUVEMPUNAGARA, VIDYARANYAPURA SUB DIVISION

BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 04

(PACKAGE CONSISTS OF 28 WORKS IN WARD NO 10 AND WARD NO 11)

NAME OF WORK:-IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT KUVEMPUNAGARA 2ND STAGE IN WARD NO. 11 KUVEMPUNAGARA, VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Measurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	KUVEMPUNAGARA 2nd STAGE								
	11th cross upto the shop (2nd stage) (khaliamma temple)	Cum	2	105.50	0.45	0.40	37.98		
	Jalahalli east, right side vinayaka provision store (infront of sharadadevi chicken center) Govt school road	Cum	2	83.00	0.60	0.40	39.84		
	DHANALAKSHMI LAYOUT								
	Dhanlakshmi Layout main road ('L' shape)	Cum	2	398.50	0.70	0.40	223.16		
	1st cross (from dead end)	Cum	2	132.00	0.60	0.40	63.36		
	2nd cross (from dead end)	Cum	2	104.50	0.60	0.40	50.16		
	3rd cross (from dead end)	Cum	2	204.60	0.60	0.40	98.21		
	CANARA BANK LAYOUT								
	2nd main road	Cum	2	173	0.70	0.40	96.60		
	PRAKRUTHI LAYOUT								
	1st Cross	Cum	2	52.80	0.60	0.40	25.34		
	2nd cross	Cum	2	44.00	0.60	0.40	21.12		
	3rd cross	Cum	1	67.10	0.60	0.40	16.10		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**671.88**	**166.42**	**111813.60**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Open Drain (Sides & Bottom)								
	KUVEMPUNAGARA 2nd STAGE								
	11th cross upto the shop (2nd stage) (khaliamma temple)	Sqm	2	105.50	1.65		348.15		

	Jalahalli east, right side vinayaka provision store (infront of sharadadevi chicken center) Govt school road	Sqm	2	83.00	1.80		298.80		
	DHANALAKSHMI LAYOUT								
	Dhanlakshmi Layout main road ('L' shape)	Sqm	2	398.50	1.80		1434.60		
	1st cross (from dead end)	Sqm	2	132.00	1.80		475.20		
	2nd cross (from dead end)	Sqm	2	104.50	1.80		376.20		
	3rd cross (from dead end)	Sqm	2	204.60	1.80		736.56		
	CANARA BANK LAYOUT								
	2nd main road	Sqm	2	173	1.80		621.00		
	PRAKRUTHI LAYOUT								
	1st Cross	Sqm	2	52.80	1.80		190.08		
	2nd cross	Sqm	2	44.00	1.80		158.40		
	3rd cross	Sqm	1	67.10	1.80		120.78		
	Sub Total						**4759.77**		
	Consider 5% Qnty for Removing	Sqm					**237.99**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**237.99**	**65.72**	**15640.60**
3	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.312)								
	Open Drain (Sides & Bottom)								
	KUVEMPUNAGARA 2nd STAGE								
	11th cross upto the shop (2nd stage) (khaliamma temple)	Sqm	2	105.50	1.65		348.15		
	Jalahalli east, right side vinayaka provision store (infront of sharadadevi chicken center) Govt school road	Sqm	2	83.00	1.80		298.80		
	DHANALAKSHMI LAYOUT								
	Dhanlakshmi Layout main road ('L' shape)	Sqm	2	398.50	1.80		1434.60		
	1st cross (from dead end)	Sqm	2	132.00	1.80		475.20		
	2nd cross (from dead end)	Sqm	2	104.50	1.80		376.20		
	3rd cross (from dead end)	Sqm	2	204.60	1.80		736.56		
	CANARA BANK LAYOUT								

	2nd main road	Sqm	2	173	1.80		621.00		
	PRAKRUTHI LAYOUT								
	1st Cross	Sqm	2	52.80	1.80		190.08		
	2nd cross	Sqm	2	44.00	1.80		158.40		
	3rd cross	Sqm	1	67.10	1.80		120.78		
	Sub Total						**4759.77**		
	Consider 5% Qnty for Refixing	Sqm					**237.99**		
	Basic rate							779.00	
	Area weightage 6%							46.74	
	Total						**237.99**	**825.74**	**196516.62**
4	KSRB 300-1 : Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.(P.No.142,I.No.19.1)								
	Road Cutting Portions								
	KUVEMPUNAGARA 2nd STAGE								
	11th cross upto the shop (2nd stage) (khaliamma temple)	Cum	1	4.70	0.30	0.23	0.32		
	DHANALAKSHMI LAYOUT								
	1st cross (from dead end)	Cum	1	4.95	0.60	0.23	0.68		
	CANARA BANK LAYOUT								
	2nd main road	Cum	2	5.28	0.70	0.23	1.70		
		Cum	1	5.72	0.80	0.23	1.05		
	Basic rate							82.00	
	Area weightage 6%							4.92	
	Total						**3.76**	**86.92**	**326.82**
5	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14)								
	For New Road								
	DHANALAKSHMI LAYOUT								
	Cross road (shishu Patashala)	Cum	1	50.82	4.20	0.15	32.02		
	Basic rate							46.00	
	Area weightage 6%							2.76	
	Total						**32.02**	**48.76**	**1561.13**
6	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1, I.No.4+I.No.5 + I.No.18	Cum					788.58		
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.5Tonne/Km.) For 15 Kms = (2.5x 1.28 x 15)/-		48.00						

	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		116.00						
	Basic rate							116.00	
	Area weightage 6%							6.96	
	Total						**788.58**	**122.96**	**96963.51**
7	KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305								
	For New Road								
	DHANALAKSHMI LAYOUT								
	Cross road (shishu Patashala)	Cum	1	50.82	4.20	0.25	53.36		
	Kalathur Layout (Drains Work)								
	2nd Main Road (LHS)	Cum	1	116.60	0.70	0.15	12.24		
	2nd Main Road (LHS)	Cum	1	60.50	0.70	0.21	8.89		
	2nd Main Road (RHS)	Cum	1	60.50	0.65	0.16	6.29		
	6th Cross Road (LHS)	Cum	1	67.10	0.70	0.11	5.17		
	6th Cross Road (RHS)	Cum	1	67.10	0.65	0.15	6.54		
	7th Cross Road (RHS)	Cum	1	68.20	0.63	0.04	1.72		
	Basic rate							302.00	
	Area weightage 6%							18.12	
	Total						**94.22**	**320.12**	**30160.77**
8	Pg. No. 149, Item No. 19.64,KSRRB 300-Compaction KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3								
	For New Road								
	DHANALAKSHMI LAYOUT								
	Cross road (shishu Patashala)	Sqm	1	50.82	4.20		213.44		
	Kalathur Layout (Drains Work)								
	2nd Main Road (LHS)	Sqm	1	116.60	0.70		81.62		
	2nd Main Road (LHS)	Sqm	1	60.50	0.70		42.35		
	2nd Main Road (RHS)	Sqm	1	60.50	0.65		39.33		
	6th Cross Road (LHS)	Sqm	1	67.10	0.70		46.97		
	6th Cross Road (RHS)	Sqm	1	67.10	0.65		43.62		
	7th Cross Road (RHS)	Sqm	1	68.20	0.63		42.97		
	Basic rate							5.00	
	Area weightage 6%							0.30	

	Total						**510.29**	**5.30**	**2704.54**
9	KSRRB M400-17.Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. complete as per specifications.MORTH specification No.406(Page No.158,I.No.20.18)								
	KUVEMPUNAGARA 2nd STAGE								
	11th cross upto the shop (2nd stage) (khaliamma temple)	Cum	1	4.70	0.30	0.23	0.32		
	DHANALAKSHMI LAYOUT								
	1st cross (from dead end)	Cum	1	4.95	0.60	0.23	0.68		
	Cross road (shishu Patashala)	Cum	1	50.82	4.20	0.25	53.36		
	CANARA BANK LAYOUT								
	2nd main road	Cum	2	5.28	0.70	0.23	1.70		
		Cum	1	5.72	0.80	0.23	1.05		
	Basic rate							1668.00	
	Area weightage 6%							100.08	
	Total						**57.12**	**1768.08**	**100994.57**
10	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1)								
	KUVEMPUNAGARA 2nd STAGE								
	11th cross upto the shop (2nd stage) (khaliamma temple)	Sqm	1	4.70	0.30		1.41		
	DHANALAKSHMI LAYOUT								
	1st cross (from dead end)	Sqm	1	4.95	0.60		2.97		
	Cross road (shishu Patashala)	Sqm	1	50.82	4.20		213.44		
	CANARA BANK LAYOUT								
	2nd main road	Sqm	2	5.28	0.70		7.39		
		Sqm	1	5.72	0.80		4.58		
	Basic rate							13.00	
	Area weightage 6%							0.78	
	Total						**229.79**	**13.78**	**3166.53**
11	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6)								
	Considered same Above Qty	Sqm					229.79		
	Basic rate							26.00	
	Area weightage 6%							1.56	
	Total						**229.79**	**27.56**	**6333.07**

12	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.163 of I.No.21.17.6)								
	KUVEMPUNAGARA 2nd STAGE								
	11th cross upto the shop (2nd stage) (khaliamma temple)	Cum	1	4.70	0.30	0.05	0.07		
	DHANALAKSHMI LAYOUT								
	1st cross (from dead end)	Cum	1	4.95	0.60	0.05	0.15		
	Cross road (shishu Patashala)	Cum	1	50.82	4.20	0.05	10.67		
	CANARA BANK LAYOUT								
	2nd main road	Cum	2	5.28	0.70	0.05	0.37		
		Cum	1	5.72	0.80	0.05	0.23		
	Sub Total						**11.49**		
	Consider 5% qty for Profile correction and Dipression filling						**0.5745**		
	Basic rate							6717.00	
	Area weightage 6%							403.02	
	Total						**12.06**	**7120.02**	**85896.49**
13	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	KUVEMPUNAGARA 2nd STAGE								
	For Road surface								
	11th cross upto the shop (2nd stage) (khaliamma temple)	Sqm	1	105.50	4.80		506.40		
	DHANALAKSHMI LAYOUT								
	Dhanlakshmi Layout main road ('L' shape)	Sqm	1	398.50	5.70		2271.45		
	1st cross (from dead end)	Sqm	1	132.00	4.60		607.20		
	Cross road (shishu Patashala)	Sqm	1	60.50	4.20		254.10		
		Sqm	1	50.82	4.20		213.44		
	2nd cross (from dead end)	Sqm	1	104.50	4.80		501.60		
	3rd cross (from dead end)	Sqm	1	204.60	4.85		992.31		
	AVR Block 1st cross	Sqm	1	45.10	4.00		180.40		
	CANARA BANK LAYOUT								
	2nd main road	Sqm	1	172.50	4.95		853.88		
	PRAKRUTHI LAYOUT								
	1st Cross	Sqm	1	52.80	4.20		221.76		
	2nd cross	Sqm	1	44.00	4.50		198.00		

	3rd cross	Sqm	1	67.10	4.30		288.53		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						**7089.07**	**3.18**	**22543.24**
14	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7)								
	For Road surface								
	KUVEMPUNAGARA 2nd STAGE								
	11th cross upto the shop (2nd stage) (khaliamma temple)	Sqm	1	105.50	4.80		506.40		
	DHANALAKSHMI LAYOUT								
	Dhanlakshmi Layout main road ('L' shape)	Sqm	1	398.50	5.70		2271.45		
	1st cross (from dead end)	Sqm	1	132.00	4.60		607.20		
	Cross road (shishu	Sqm	1	60.50	4.20		254.10		
	Patashala)	Sqm	1	50.82	4.20		213.44		
	2nd cross (from dead end)	Sqm	1	104.50	4.80		501.60		
	3rd cross (from dead end)	Sqm	1	204.60	4.85		992.31		
	AVR Block 1st cross	Sqm	1	45.10	4.00		180.40		
	CANARA BANK LAYOUT								
	2nd main road	Sqm	1	172.50	4.95		853.88		
	PRAKRUTHI LAYOUT								
	1st Cross	Sqm	1	52.80	4.20		221.76		
	2nd cross	Sqm	1	44.00	4.50		198.00		
	3rd cross	Sqm	1	67.10	4.30		288.53		
	Basic rate							12.00	
	Area weightage 6%							0.72	
	Total						**7089.07**	**12.72**	**90172.96**
15	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6)								
	KUVEMPUNAGARA 2nd STAGE								
	11th cross upto the shop (2nd stage) (khaliamma temple)	Cum	1	105.50	4.80	0.04	20.26		
	DHANALAKSHMI LAYOUT								
	Dhanlakshmi Layout main road ('L' shape)	Cum	1	398.50	5.70	0.04	90.86		
	1st cross (from dead end)	Cum	1	132.00	4.60	0.04	24.29		
	Cross road (shishu	Cum	1	60.50	4.20	0.04	10.16		
	Patashala)	Cum	1	50.82	4.20	0.04	8.54		

	2nd cross (from dead end)	Cum	1	104.50	4.80	0.04	20.06		
	3rd cross (from dead end)	Cum	1	204.60	4.85	0.04	39.69		
	AVR Block 1st cross	Cum	1	45.10	4.00	0.04	7.22		
	CANARA BANK LAYOUT								
	2nd main road	Cum	1	172.50	4.95	0.04	34.16		
	PRAKRUTHI LAYOUT								
	1st Cross	Cum	1	52.80	4.20	0.04	8.87		
	2nd cross	Cum	1	44.00	4.50	0.04	7.92		
	3rd cross	Cum	1	67.10	4.30	0.04	11.54		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	KUVEMPUNAGARA 2nd STAGE								
	11th cross upto the shop (2nd stage) (khaliamma temple)	Cum	1	105.50	4.80	0.04	2.03		
	DHANALAKSHMI LAYOUT								
	Dhanlakshmi Layout main road ('L' shape)	Cum	1	398.50	5.70	0.04	9.09		
	1st cross (from dead end)	Cum	1	132.00	4.60	0.04	2.43		
	Cross road (shishu Patashala)	Cum	1	60.50	4.20	0.04	1.02		
		Cum	1	50.82	4.20	0.04	0.85		
	2nd cross (from dead end)	Cum	1	104.50	4.80	0.04	2.01		
	3rd cross (from dead end)	Cum	1	204.60	4.85	0.04	3.97		
	AVR Block 1st cross	Cum	1	45.10	4.00	0.04	0.72		
	CANARA BANK LAYOUT								
	2nd main road	Cum	1	172.50	4.95	0.04	3.42		
	PRAKRUTHI LAYOUT								
	1st Cross	Cum	1	52.80	4.20	0.04	0.89		
	2nd cross	Cum	1	44.00	4.50	0.04	0.79		
	3rd cross	Cum	1	67.10	4.30	0.04	1.15		
	Basic rate							7659.00	
	Area weightage 6%							459.54	
	Total						**311.92**	**8118.54**	**2532327.17**
16	Providing Plastic to Bituminous concrete @ 8%								
	8% OF BC	Kg		0.08	311.92	117.00	**2919.56**		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						**2919.56**	**28.62**	**83557.87**
17	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185- I.No.24.15)								
	KUVEMPUNAGARA 2nd STAGE								

	11th cross upto the shop (2nd stage) (khaliamma temple)	Sqm	2	105.50	0.10		21.10		
	DHANALAKSHMI LAYOUT								
	Dhanlakshmi Layout main road ('L' shape)	Cum	2	398.50	0.10		79.70		
	1st cross (from dead end)	Cum	1	132.00	0.10		13.20		
	Cross road (shishu Patashala)	Cum	2	60.50	0.10		12.10		
		Cum	2	50.82	0.10		10.16		
	2nd cross (from dead end)	Cum	2	104.50	0.10		20.90		
	3rd cross (from dead end)	Cum	2	204.60	0.10		40.92		
	AVR Block 1st cross	Cum	2	45.10	0.10		9.02		
	CANARA BANK LAYOUT								
	2nd main road	Cum	2	172.50	0.10		34.50		
	PRAKRUTHI LAYOUT								
	1st Cross	Sqm	2	52.80	0.10		10.56		
	2nd cross	Sqm	2	44.00	0.10		8.80		
	3rd cross	Sqm	2	67.10	0.10		13.42		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						**274.38**	**542.72**	**148913.68**
18	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202(P.No.138- I.No.18.47)								
	KUVEMPUNAGARA 2nd STAGE								
	Jalahalli east, right side vinayaka provision store (infront of sharadadevi chicken center) Govt school road	Cum	1	83.00	6.50	0.15	80.93		
	Basic rate							781.00	
	Area weightage 6%							46.86	
	Total						**80.93**	**827.86**	**66994.57**
19	KSRRB M600-1. Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications.MORTH Specification No. 601, Item No. 22.1, Pg No. 176								
	KUVEMPUNAGARA 2nd STAGE								
	Jalahalli east, right side vinayaka provision store (infront of sharadadevi chicken center) Govt school road	Cum	1	83.00	6.50	0.15	80.93		

	Basic rate							3761.00	
	Area weightage 6%							225.66	
	Total						**80.93**	**3986.66**	**322620.46**
20	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) Pg No.177 Item No.22.6.1								
	KUVEMPUNAGARA 2nd STAGE								
	Jalahalli east, right side vinayaka provision store (infront of sharadadevi chicken center) Govt school road	Cum	1	83.00	6.50	0.15	80.93		
	Kalathur Layout (Drains Work)								
	2nd Main Road (LHS)	Cum	1	60.50	0.70	0.10	4.24		
	2nd Main Road (RHS)	Cum	1	60.50	0.65	0.10	3.93		
	6th Cross Road (LHS)	Cum	1	67.10	0.70	0.10	4.70		
	6th Cross Road (RHS)	Cum	1	67.10	0.65	0.10	4.36		
	7th Cross Road (LHS)	Cum	1	68.20	0.68	0.10	4.64		
	7th Cross Road (RHS)	Cum	1	68.20	0.63	0.10	4.30		
	Sub Total						**107.09**		
	Consider 5% qty for camber correction						**5.35**		
	Basic rate							5866.00	
	Area weightage 6%							351.96	
	Total						**112.44**	**6217.96**	**699144.06**
21	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Conrete Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms and 2Ltr of Primer per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.192- I.No.24.57)								
	KUVEMPUNAGARA 2nd STAGE								
	Jalahalli east, right side vinayaka provision store (infront of sharadadevi chicken center) Govt school road	Sqm	2	83.00	0.10		16.60		
	Basic rate							647.00	
	Area weightage 6%							38.82	

	Total						**16.60**	**685.82**	**11384.61**
22	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8(M7.5)with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregtes @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2 (P.No.12,I.No.4.3)								
	Kalathur Layout (Drains Work)								
	2nd Main Road (LHS)	Cum	1	60.50	0.70	0.15	6.35		
	2nd Main Road (RHS)	Cum	1	60.50	0.65	0.15	5.90		
	6th Cross Road (LHS)	Cum	1	67.10	0.70	0.15	7.05		
	6th Cross Road (RHS)	Cum	1	67.10	0.65	0.15	6.54		
	7th Cross Road (LHS)	Cum	1	68.20	0.68	0.15	6.96		
	7th Cross Road (RHS)	Cum	1	68.20	0.63	0.15	6.44		
	Basic rate							4867.00	
	Area weightage 6%							292.02	
	Total						**39.24**	**5159.02**	**202441.49**
23	Providing and laying reinforced cement precast slab of mix CC 1:1.5:3 using 20mm down size graded Granite metal using HYSD 10mm dia steel @10mm c/c both ways								
	Kalathur Layout (Drains Work)								
	Cover Slab	Sqm	1	10.45	2.68		28.01		
	Approved Data rate							1957.00	
	Total						**28.01**	**1957**	**54815.57**
								Sub Total	**4886993.96**
	Preparation of DPR And Project management Consultancy Charges(2% of estimated cost)								100000
	Miscellenious and rounding								13006
	TOTAL AMOUNT								**5000000**
	RUPEES FIFTY LAKHS ONLY								

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore -97

11) IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT SINGAPURA LAYOUT AND SURROUNDING AREAS IN WARD NO. 11 KUVEMPUNAGARA, VIDYARANYAPURA SUB DIVISION

BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 04

(PACKAGE CONSISTS OF 28 WORKS IN WARD NO 10 AND WARD NO 11)

NAME OF WORK :IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT SINGAPURA LAYOUT AND SURROUNDING AREAS IN WARD NO. 11 KUVEMPUNAGARA, VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Measurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	SINGAPURA PARADISE								
	2nd main tower road (from singapura main road to dead end)	Cum	2	433.40	0.60	0.40	208.03		
	Opposite to Tower road	Cum	2	155.10	0.55	0.40	68.24		
	Cross Roads from End	Cum	1	22.00	0.50	0.40	4.40		
	4th cross road ward 11, (from singapura main road to dead road)	Cum	2	151.80	0.60	0.40	72.86		
	3rd main road (from singapura main road to dead road)	Cum	2	198.00	0.60	0.40	95.04		
	Cross Road 1	Cum	1	107.60	0.60	0.40	25.82		
	Cross Road 2	Cum	2	100.10	0.60	0.40	48.05		
	Cross Road 3	Cum	2	101.20	0.55	0.40	44.53		
	Cross Road 4	Cum	2	95.70	0.60	0.40	45.94		
	3rd main and 3rd cross road	Cum	2	143.00	0.45	0.40	51.48		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**664.40**	**166.42**	**110568.78**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Open Drain (Sides & Bottom)								
	SINGAPURA PARADISE								
	2nd main tower road (from singapura main road to dead end)	Sqm	2	433.40	1.80		1560.24		
	Opposite to Tower road	Sqm	2	155.10	1.75		542.85		
	Cross Roads from End	Sqm	1	22.00	1.70		37.40		
	4th cross road ward 11, (from singapura main road to dead road)	Sqm	2	151.80	1.80		546.48		
	3rd main road (from singapura main road to dead road)	Sqm	2	198.00	1.80		712.80		
	Cross Road 1	Sqm	1	107.60	1.80		193.68		
	Cross Road 2	Sqm	2	100.10	1.80		360.36		
	Cross Road 3	Sqm	2	101.20	1.75		354.20		

	Cross Road 4	Sqm	2	95.70	1.80		344.52		
	3rd main and 3rd cross road	Sqm	2	143.00	1.65		471.90		
	Sub Total						**5124.43**		
	Consider 5% Qnty for Removing	Sqm					**256.22**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**256.22**	**65.72**	**16838.88**
3	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.312)								
	Open Drain (Sides & Bottom)								
	SINGAPURA PARADISE								
	2nd main tower road (from singapura main road to dead end)	Sqm	2	433.40	1.80		1560.24		
	Opposite to Tower road	Sqm	2	155.10	1.75		542.85		
	Cross Roads from End	Sqm	1	22.00	1.70		37.40		
	4th cross road ward 11, (from singapura main road to dead road)	Sqm	2	151.80	1.80		546.48		
	3rd main road (from singapura main road to dead road)	Sqm	2	198.00	1.80		712.80		
	Cross Road 1	Sqm	1	107.60	1.80		193.68		
	Cross Road 2	Sqm	2	100.10	1.80		360.36		
	Cross Road 3	Sqm	2	101.20	1.75		354.20		
	Cross Road 4	Sqm	2	95.70	1.80		344.52		
	3rd main and 3rd cross road	Sqm	2	143.00	1.65		471.90		
	Sub Total						**5124.43**		
	Consider 5% Qnty for Refixing	Sqm					**256.22**		
	Basic rate							779.00	
	Area weightage 6%							46.74	
	Total						**256.22**	**825.74**	**211572.34**
4	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14)								
	SINGAPURA PARADISE								
	Cross Roads from End	Cum	1	59.50	3.30	0.15	29.45		
		Cum	1	42.50	4.20	0.15	26.78		
		Cum	1	48.50	4.30	0.15	31.28		
	3rd main and 3rd cross road	Cum	1	15.40	4.70	0.15	10.86		
	Basic rate							46.00	
	Area weightage 6%							2.76	
	Total						**98.37**	**48.76**	**4796.37**
5	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1 +I.No.4	Cum					762.76		

	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs2.5Tonne/Km.) For 15 Kms = (2.5 x 1.28 x 15)/-		48.00						
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		116.00						
	Basic rate							116.00	
	Area weightage 6%							6.96	
	Total						**762.76**	**122.96**	**93789.34**
6	KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305								
	For New Road								
	SINGAPURA PARADISE								
	Cross Roads from End	Cum	1	59.50	3.30	0.25	49.09		
		Cum	1	42.50	4.20	0.25	44.63		
		Cum	1	48.50	4.30	0.25	52.14		
	3rd main and 3rd cross road	Cum	1	15.40	4.70	0.25	18.10		
	Basic rate							302.00	
	Area weightage 6%							18.12	
	Total						**163.95**	**320.12**	**52482.07**
7	Pg. No. 149, Item No. 19.64,KSRRB 300-Compaction KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3								
	For New Road								
	SINGAPURA PARADISE								
	Cross Roads from End	Sqm	1	59.50	3.30		196.35		
		Sqm	1	42.50	4.20		178.50		
		Sqm	1	48.50	4.30		208.55		
	3rd main and 3rd cross road	Sqm	1	15.40	4.70		72.38		
	Basic rate							5.00	
	Area weightage 6%							0.30	
	Total						**655.78**	**5.30**	**3475.63**
8	KSRRB M400-17.Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. complete as per specifications.MORTH specification No.406(Page No.158,I.No.20.18)								
	SINGAPURA PARADISE								
	3rd main and 3rd cross road	Cum	1	143.00	4.60	0.23	151.29		
	Cross Roads from End	Cum	1	59.50	3.30	0.23	45.16		
		Cum	1	42.50	4.20	0.23	41.06		
		Cum	1	48.50	4.30	0.23	47.97		
	3rd main and 3rd cross road	Cum	1	15.40	4.70	0.23	16.65		

	Basic rate							1668.00	
	Area weightage 6%							100.08	
	Total						**302.12**	**1768.08**	**534178.34**
9	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1)								
	SINGAPURA PARADISE								
	3rd main and 3rd cross road	Sqm	1	143.00	4.60		657.80		
	Cross Roads from End	Sqm	1	59.50	3.30		196.35		
		Sqm	1	42.50	4.20		178.50		
		Sqm	1	48.50	4.30		208.55		
	3rd main and 3rd cross road	Sqm	1	15.40	4.70		72.38		
	2nd cross (right side shiva sidhi house)	Sqm	1	39.60	3.90		154.44		
	Basic rate							13.00	
	Area weightage 6%							0.78	
	Total						**1468.02**	**13.78**	**20229.32**
10	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6)								
	Considered same Above Qty	Sqm					1468.02		
	Basic rate							26.00	
	Area weightage 6%							1.56	
	Total						**1468.02**	**27.56**	**40458.63**
11	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.163 of I.No.21.17.6)								
	SINGAPURA PARADISE								
	3rd main and 3rd cross road	Cum	1	143.00	4.60	0.05	32.89		
		Cum	1	15.40	4.70	0.05	3.62		
	Cross Roads from End	Cum	1	59.50	3.30	0.05	9.82		
		Cum	1	42.50	4.20	0.05	8.93		
		Cum	1	48.50	4.30	0.05	10.43		
	Sub Total						**65.68**		
	Consider 5% qty for Profile correction and Dipression filling						**3.2840**		
	Basic rate							6717.00	
	Area weightage 6%							403.02	
	Total						**68.96**	**7120.02**	**491017.58**
12	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	SINGAPURA PARADISE								
	For Road surface								

	2nd main tower road (from singapura main road to dead end)	Sqm	1	433.40	5.20		2253.68		
	Opposite to Tower road	Sqm	1	155.10	4.75		736.73		
	Cross Roads from End	Sqm	1	59.50	3.30		196.35		
		Sqm	1	42.50	4.20		178.50		
		Sqm	1	48.50	4.30		208.55		
	4th cross road ward 11, (from singapura main road to dead road)	Sqm	1	151.80	4.80		728.64		
	3rd main road (from singapura main road to dead road)	Sqm	1	198.00	4.50		891.00		
	Cross Road 1	Sqm	1	107.60	5.20		559.52		
	Cross Road 2	Sqm	1	100.10	5.10		510.51		
	Cross Road 3	Sqm	1	101.20	5.30		536.36		
	Cross Road 4	Sqm	1	95.70	5.20		497.64		
	3rd main and 3rd cross road	Sqm	1	143.00	4.60		657.80		
		Sqm	1	24.20	4.70		113.74		
		Sqm	1	15.40	4.70		72.38		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						**8141.40**	**3.18**	**25889.64**
13	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7)								
	For Road surface								
	SINGAPURA PARADISE								
	2nd main tower road (from singapura main road to dead end)	Sqm	1	433.40	5.20		2253.68		
	Opposite to Tower road	Sqm	1	155.10	4.75		736.73		
	Cross Roads from End	Sqm	1	59.50	3.30		196.35		
		Sqm	1	42.50	4.20		178.50		
		Sqm	1	48.50	4.30		208.55		
	4th cross road ward 11, (from singapura main road to dead road)	Sqm	1	151.80	4.80		728.64		
	3rd main road (from singapura main road to dead road)	Sqm	1	198.00	4.50		891.00		
	Cross Road 1	Sqm	1	107.60	5.20		559.52		
	Cross Road 2	Sqm	1	100.10	5.10		510.51		
	Cross Road 3	Sqm	1	101.20	5.30		536.36		
	Cross Road 4	Sqm	1	95.70	5.20		497.64		
	3rd main and 3rd cross road	Sqm	1	143.00	4.60		657.80		
		Sqm	1	24.20	4.70		113.74		
		Sqm	1	15.40	4.70		72.38		
	Basic rate							12.00	
	Area weightage 6%							0.72	
	Total						**8141.40**	**12.72**	**103558.54**

14	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6)								
	SINGAPURA PARADISE								
	2nd main tower road (from singapura main road to dead end)	Cum	1	433.40	5.20	0.04	90.15		
	Opposite to Tower road	Cum	1	155.10	4.75	0.04	29.47		
	Cross Roads from End	Cum	1	59.50	3.30	0.04	7.85		
		Cum	1	42.50	4.20	0.04	7.14		
		Cum	1	48.50	4.30	0.04	8.34		
	4th cross road ward 11, (from singapura main road to dead road)	Cum	1	151.80	4.80	0.04	29.15		
	3rd main road (from singapura main road to dead road)	Cum	1	198.00	4.50	0.04	35.64		
	Cross Road 1	Cum	1	107.60	5.20	0.04	22.38		
	Cross Road 2	Cum	1	100.10	5.10	0.04	20.42		
	Cross Road 3	Cum	1	101.20	5.30	0.04	21.45		
	Cross Road 4	Cum	1	95.70	5.20	0.04	19.91		
	3rd main and 3rd cross road	Cum	1	143.00	4.60	0.04	26.31		
		Cum	1	24.20	4.70	0.04	4.55		
		Cum	1	15.40	4.70	0.04	2.90		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	SINGAPURA PARADISE								
	2nd main tower road (from singapura main road to dead end)	Cum	1	433.40	5.20	0.04	9.01		
	Opposite to Tower road	Cum	1	155.10	4.75	0.04	2.95		
	Cross Roads from End	Cum	1	59.50	3.30	0.04	0.79		
		Cum	1	42.50	4.20	0.04	0.71		
		Cum	1	48.50	4.30	0.04	0.83		
	4th cross road ward 11, (from singapura main road to dead road)	Cum	1	151.80	4.80	0.04	2.91		
	3rd main road (from singapura main road to dead road)	Cum	1	198.00	4.50	0.04	3.56		
	Cross Road 1	Cum	1	107.60	5.20	0.04	2.24		
	Cross Road 2	Cum	1	100.10	5.10	0.04	2.04		
	Cross Road 3	Cum	1	101.20	5.30	0.04	2.15		
	Cross Road 4	Cum	1	95.70	5.20	0.04	1.99		
	3rd main and 3rd cross road	Cum	1	143.00	4.60	0.04	2.63		
		Cum	1	24.20	4.70	0.04	0.45		
		Cum	1	15.40	4.70	0.04	0.29		
	Basic rate							7659.00	
	Area weightage 6%							459.54	

	Total						**358.22**	**8118.54**	**2908234.60**
15	Providing Plastic to Bituminous concrete @ 8%								
	8% OF BC	Kg		0.08	358.22	117.00	**3352.95**		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						**3352.95**	**28.62**	**95961.49**
16	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185- I.No.24.15)								
	SINGAPURA PARADISE								
	2nd main tower road (from singapura main road to dead end)	Sqm	2	433.40	0.10		86.68		
	Opposite to Tower road	Sqm	2	155.10	0.10		31.02		
	Cross Roads from End	Sqm	2	59.50	0.10		11.90		
		Sqm	2	42.50	0.10		8.50		
		Sqm	2	48.50	0.10		9.70		
	4th cross road ward 11, (from singapura main road to dead road)	Sqm	2	151.80	0.10		30.36		
	3rd main road (from singapura main road to dead road)	Sqm	2	198.00	0.10		39.60		
	Cross Road 1	Sqm	2	107.60	0.10		21.52		
	Cross Road 2	Sqm	2	100.10	0.10		20.02		
	Cross Road 3	Sqm	2	101.20	0.10		20.24		
	Cross Road 4	Sqm	2	95.70	0.10		19.14		
	3rd main and 3rd cross road	Sqm	2	143.00	0.10		28.60		
		Sqm	2	24.20	0.10		4.84		
		Sqm	2	15.40	0.10		3.08		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						**335.20**	**542.72**	**181919.74**
								Sub Total	**4894971.31**
	Preparation of DPR And Project management Consultancy Charges(2% of estimated cost)								100000
	Miscellenious and rounding								5029
	TOTAL AMOUNT								**5000000**
	RUPEES FIFTY LAKHS ONLY								

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

12) IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT LAKKAPPA LAYOUT AND SURROUNDING AREAS IN WARD NO. 11 KUVEMPUNAGARA, VIDYARANYAPURA SUB DIVISION

BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 04

(PACKAGE CONSISTS OF 28 WORKS IN WARD NO 10 AND WARD NO 11)

NAME OF WORK :IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT LAKKAPPA LAYOUT AND SURROUNDING AREAS IN WARD NO. 11 KUVEMPUNAGARA, VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	NANJAPPA LAYOUT								
	Ramchandrapura main Road to Doddabommasandra	Cum	2	672.50	0.60	0.40	322.80		
	DODDABOMMASANDRA								
	Partially unnamed	Cum	2	278.50	0.55	0.40	122.54		
	SINGAPURA PARADISE								
	Sri varadaraja swamy Badavane 2nd main road, 3rd cross	Cum	2	102.00	0.45	0.40	36.72		
	Sri varadaraja swamy Badavane, Basavanna main road	Cum	2	67.80	0.60	0.40	32.54		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**514.60**	**166.42**	**85640.40**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Closed Drain								
	Cover Slab								
	NANJAPPA LAYOUT								
	Ramchandrapura main Road to Doddabommasandra	Cum	2	672.50	0.60		807.00		
	DODDABOMMASANDRA								
	Partially unnamed	Sqm	2	278.50	0.55		306.35		
	Open Drain (Sides & Bottom)								
	SINGAPURA PARADISE								
	Sri varadaraja swamy Badavane 2nd main road, 3rd cross	Sqm	2	102.00	1.65		336.60		
	Sri varadaraja swamy Badavane, Basavanna main road	Sqm	2	67.80	1.80		244.08		
	Sub Total						**1694.03**		
	Consider 5% Qnty for Removing						**84.70**		

	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**84.70**	**65.72**	**5566.58**
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33)								
	Closed Drain								
	Cover Slab								
	NANJAPPA LAYOUT								
	Ramchandrapura main Road to Doddabommasandra	Cum	2	672.50	0.60		807.00		
	DODDABOMMASANDRA								
	Partially unnamed	Sqm	2	278.50	0.55		306.35		
	Sub Total						**1113.35**		
	Consider 30% Qnty for Removing & Refixing						**334.01**		
	Basic rate							76.00	
	Area weightage 6%							4.56	
	Total						**334.01**	**80.56**	**26907.44**
4	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.1)								
	Closed Drain								
	Cover Slab								
	NANJAPPA LAYOUT								
	Ramchandrapura main Road to Doddabommasandra	Cum	2	672.50	0.60		807.00		
	DODDABOMMASANDRA								
	Partially unnamed	Sqm	2	278.50	0.55		306.35		
	Sub Total						**1113.35**		
	Consider 5% Qnty for Refixing						**55.67**		
	Basic rate							628.00	
	Area weightage 6%							37.68	
	Total						**55.67**	**665.68**	**37056.74**
5	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.312)								
	Open Drain (Sides & Bottom)								
	SINGAPURA PARADISE								
	Sri varadaraja swamy Badavane 2nd main road, 3rd cross	Sqm	2	102.00	1.65		336.60		
	Sri varadaraja swamy Badavane, Basavanna main road	Sqm	2	67.80	1.80		244.08		
	Sub Total						**580.68**		
	Consider 5% Qnty for Refixing	Sqm					**29.03**		
	Basic rate							779.00	
	Area weightage 6%							46.74	

	Total						**29.03**	**825.74**	**23974.54**
6	KSRB 300-1 : Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.(P.No.142,I.No.19.1)								
	NANJAPPA LAYOUT								
	Ramchandrapura	Cum	1	6.27	0.20	0.23	0.29		
	main Road to	Cum	1	6.49	0.20	0.23	0.30		
	DODDABOMMAS ANDRA								
	Partially unnamed	Cum	3	6.05	1.10	0.23	4.59		
	Road (from peta	Cum	2	5.39	0.80	0.23	1.98		
	Basic rate							82.00	
	Area weightage 6%							4.92	
	Total						**7.16**	**86.92**	**622.56**
7	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1+I.No.6+ I.No.17	Cum					582.79		
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.5 Tonne/Km.) For 15 Kms = (2.5x 1.28 x 15)/-		48.00						
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		116.00						
	Basic rate							116.00	
	Area weightage 6%							6.96	
	Total						**582.79**	**122.96**	**71659.42**
8	KSRRB M400-17.Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. complete as per specifications.MORTH specification No.406(Page No.158,I.No.20.18)								
	NANJAPPA LAYOUT								
	Ramchandrapura	Cum	1	6.27	0.20	0.23	0.29		
	main Road to	Cum	1	6.49	0.20	0.23	0.30		
	Basic rate							1668.00	
	Area weightage 6%							100.08	
	Total						**0.59**	**1768.08**	**1037.79**
9	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1)								
	NANJAPPA LAYOUT								
	Ramchandrapura	Sqm	1	6.27	0.20		1.25		
	main Road to	Sqm	1	6.49	0.20		1.30		
	DODDABOMMAS ANDRA								
	Partially unnamed	Cum	3	6.05	1.10		19.97		
	Road (from peta	Cum	2	5.39	0.80		8.62		

	Basic rate							13.00	
	Area weightage 6%							0.78	
	Total						**31.14**	**13.78**	**429.12**
10	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6)								
	Considered same Above Qty	Sqm					31.14		
	Basic rate							26.00	
	Area weightage 6%							1.56	
	Total						**31.14**	**27.56**	**858.25**
11	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.163 of I.No.21.17.6)								
	NANJAPPA LAYOUT								
	Ramchandrapura	Sqm	1	6.27	0.20	0.05	0.06		
	main Road to	Sqm	1	6.49	0.20	0.05	0.06		
	DODDABOMMASANDRA								
	Partially unnamed	Cum	3	6.05	1.10	0.05	1.00		
	Road (from peta	Cum	2	5.39	0.80	0.05	0.43		
	Sub Total						**1.56**		
	Consider 5% qty for Profile correction and Dipression filling						**0.08**		
	Basic rate							6717.00	
	Area weightage 6%							403.02	
	Total						**1.63**	**7120.02**	**11640.54**
12	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	For Road surface								
	NANJAPPA LAYOUT								
	Ramchandrapura main Road to Doddabommasandra	Sqm	1	672.50	6.00		4035.00		
	DODDABOMMASANDRA								
	Partially unnamed Road (from peta siddappa circle to apoorva mansion apartment) 7th corss	Sqm	1	278.50	5.50		1531.75		
	SINGAPURA PARADISE								
	Sri varadaraja swamy Badavane 2nd main road, 3rd cross	Sqm	1	102.00	5.10		520.20		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						**6086.95**	**3.18**	**19356.50**

13	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7)								
	For Road surface								
	NANJAPPA LAYOUT								
	Ramchandrapura main Road to Doddabommasandra	Sqm	1	672.50	6.00		4035.00		
	DODDABOMMASANDRA								
	Partially unnamed Road (from peta siddappa circle to apoorva mansion apartment) 7th corss	Sqm	1	278.50	5.50		1531.75		
	SINGAPURA PARADISE								
	Sri varadaraja swamy Badavane 2nd main road, 3rd cross	Sqm	1	102.00	5.10		520.20		
	Basic rate							12.00	
	Area weightage 6%							0.72	
	Total						**6086.95**	**12.72**	**77426.00**
14	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6)								
	NANJAPPA LAYOUT								
	Ramchandrapura main Road to Doddabommasandra	Sqm	1	672.50	6.00	0.04	161.40		
	DODDABOMMASANDRA								
	Partially unnamed Road (from peta siddappa circle to apoorva mansion apartment) 7th corss	Cum	1	278.50	5.50	0.04	61.27		
	SINGAPURA PARADISE								
	Sri varadaraja swamy Badavane 2nd main road, 3rd cross	Cum	1	102.00	5.10	0.04	20.81		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	NANJAPPA LAYOUT								
	Ramchandrapura main Road to Doddabommasandra	Sqm	1	672.50	6.00	0.04	16.14		

	DODDABOMMASANDRA								
	Partially unnamed Road (from peta siddappa circle to apoorva mansion apartment) 7th corss	Cum	1	278.50	5.50	0.04	6.13		
	SINGAPURA PARADISE								
	Sri varadaraja swamy Badavane 2nd main road, 3rd cross	Cum	1	102.00	5.10	0.04	2.08		
	Basic rate							7659.00	
	Area weightage 6%							459.54	
	Total						**267.83**	**8118.54**	**2174354.47**
15	Providing Plastic to Bituminous concrete @ 8%								
	8% OF BC	Kg		0.08	267.83	117.00	**2506.85**		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						**2506.85**	**28.62**	**71746.03**
16	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185- I.No.24.15)								
	NANJAPPA LAYOUT								
	Ramchandrapura main Road to Doddabommasandra	Sqm	2	672.50	0.10		134.50		
	DODDABOMMASANDRA								
	Partially unnamed Road (from peta siddappa circle to apoorva mansion apartment) 7th corss	Sqm	2	278.50	0.10		55.70		
	SINGAPURA PARADISE								
	Sri varadaraja swamy Badavane 2nd main road, 3rd cross	Sqm	2	102.00	0.10		20.40		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						**210.60**	**542.72**	**114296.83**
17	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202(P.No.138- I.No.18.47)								
	SINGAPURA PARADISE								
	Sri varadaraja swamy Badavane, Basavanna main road	Cum	1	67.80	6.00	0.15	61.02		
	Basic rate							781.00	
	Area weightage 6%							46.86	
	Total						**61.02**	**827.86**	**50516.02**

18	KSRRB M600-1. Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications.MORTH Specification No. 601, Item No. 22.1, Pg No. 176								
	SINGAPURA PARADISE								
	Sri varadaraja swamy Badavane, Basavanna main road	Cum	1	67.80	6.00	0.15	61.02		
	Basic rate							3761.00	
	Area weightage 6%							225.66	
	Total						**61.02**	**3986.66**	**243265.99**
19	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) Pg No.177 Item No.22.6.1								
	SINGAPURA PARADISE								
	Sri varadaraja swamy Badavane, Basavanna main road	Cum	1	67.80	6.00	0.15	61.02		
	Sub Total						**61.02**		
	Consider 5% qty for camber correction						**3.05**		
	Basic rate							5866.00	
	Area weightage 6%							351.96	
	Total						**64.07**	**6217.96**	**398390.92**

20	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Conrete Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms and 2Ltr of Primer per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.192- I.No.24.57)								
	SINGAPURA PARADISE								
	Sri varadaraja swamy Badavane, Basavanna main road	Sqm	2	67.80	0.10		13.56		
	Basic rate							647.00	
	Area weightage 6%							38.82	
	Total						**13.56**	**685.82**	**9299.72**
								Sub Total	**3424045.86**
	Preparation of DPR And Project management Consultancy Charges(2% of estimated cost)								70000
	Miscellenious and rounding								5954
	TOTAL AMOUNT								**3500000**
	RUPEES THIRTY FIVE LAKHS ONLY								

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

Assistant Executive Engineer
Vidyaranyapura Sub Division
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